

Machines at Work

See how simple and compound machines help people complete tasks.

3.2.d “simple and compound machines have many applications.”

NAME _____

DATE _____

1 READ AND MARK _____ Read it twice

YOUR JOB Underline each machine named in the passage. Circle the words that tell what job each machine helps people do.

Garden Tools and Travel Tools

- ① At the community garden, Maya sees machines helping people do jobs. A ramp at the shed lets a cart roll up instead of being lifted straight up. The ramp is an inclined plane, a simple machine. It changes the direction of the push and can make moving a heavy load easier, even though the cart travels farther.
- ② Near the garden beds, a wheelbarrow carries soil. Its wheel and axle help it roll. Its handles work as levers when Maya lifts them. Because it joins more than one simple machine, the wheelbarrow is a compound machine. It helps one person carry a load that would be hard to carry by hand.
- ③ Other tools also combine simple machines for useful applications. A bicycle is another compound machine. Pedals and a chain turn gears, and the wheels move the rider. Brake handles are levers. Each part has a job, but the parts work together to help a person travel from place to place using less effort than walking long distances.

2 ANSWER WITH EVIDENCE _____ Use the passage

1 What simple machine is the ramp, and what job does it help the cart do?

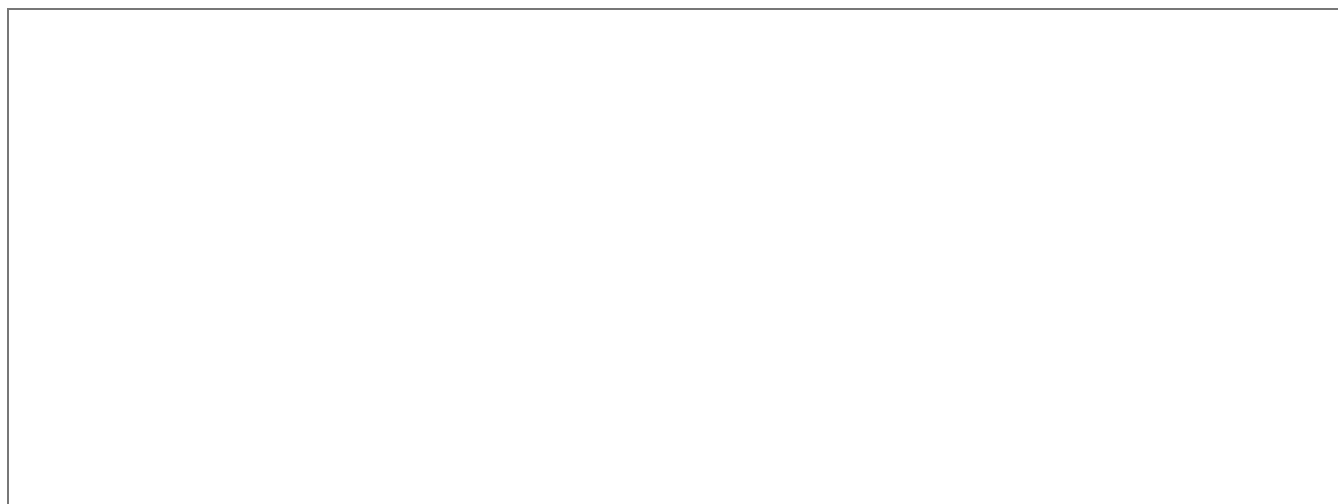
2 Which two simple machines are part of the wheelbarrow?

3 Why is the wheelbarrow a compound machine?

4 How do the wheelbarrow and bicycle have different applications?

3 YOUR TURN _____ Your own words

In the box, draw a compound machine that could help with a home or school task not named in the passage. Label two simple machines in your drawing, then write one sentence telling the task it helps do.



PART 1 • READ AND MARK

Underline each machine named in the passage. Circle the words that tell what job each machine helps people do. Accept any marking that follows this job and points at the right text.

PART 2 • ANSWERS

#	QUESTION	ANSWER
1	What simple machine is the ramp, and what job does it help the cart do?	The ramp is an inclined plane. It helps the cart roll up to the shed.
2	Which two simple machines are part of the wheelbarrow?	A wheel and axle and levers.
3	Why is the wheelbarrow a compound machine?	It is a compound machine because it joins more than one simple machine, including a wheel and axle and levers.
4	How do the wheelbarrow and bicycle have different applications?	The wheelbarrow carries soil or other loads. The bicycle helps a person travel from place to place.

PART 3 • YOUR TURN (SAMPLE ANSWER)

Drawing: A can opener labeled wheel and axle and wedge. It helps open a can of food.

Accept any accurate compound machine with at least two correctly labeled simple machines. The written sentence should name a sensible task or application for the machine.